Application Serial No. 10/049,949 Amendment dated January 18, 2005 Reply to Office Action dated September 23, 2004

REMARKS/ARGUMENTS

The claims have been amended to place them in better form but is believed that they are of substantially the same scope as the claims as filed. It is submitted that the claims patentably define over the prior art cited by the Examiner for the reasons set forth hereinafter.

The invention as claimed calls for the presence of a skull device, such as a skull crucible or groove, which is heated by means of high frequency induction energy created in an electrical coil which thereby acts on the melt inside the crucible to produce very violent currents within the melt. These currents lead to a strong turbulence which is present in the entire space of the crucible, leaving no dead corners, so that the entire melt will be acted on by such currents. These currents are sufficient to achieve a very high level of mixing of the added color and existing melt to such an extent that no mechanical agitator is necessary. Indeed, a primary advantage of the invention is the elimination of the need for mechanical agitators, which have significant disadvantages, as is generally known in the art.

Pieper '902 discloses an apparatus and method which specifically teaches away from what the present invention intends to accomplish in that Pieper '902 does not employ a skull crucible but rather utilizes a mechanical agitator to achieve the needed amount of homogenization (see column 4, lines 13-18). The electrical coils 8 and 9 employed by Pieper '902 in the vertical passage produce only Joule's heat, and although there is a swirling action and some homogenization, it is obviously not sufficient to achieve the necessary homogenization or otherwise Pieper '902 would not employ the subsequent mechanical agitator. Accordingly Pieper '902 neither discloses the invention nor provides any suggestion that the stain be introduced either before or in a skull crucible, which would provide the sufficient amount of homogenization without the necessity for a mechanical agitator due to the violent currents produced within the skull crucible.

Although Mantesa '121 discloses an induction heating vessel 22, there is no suggestion whatsoever to add a stain to the melt either before or within the induction heating vessel to thereby utilize the currents produced within the melt to completely homogenize the mixture.

In short, neither of the prior art references discloses the crux of the present invention, namely, utilizing the violent currents within a skull device to cause homogenization of the melt and a stain added to the melt either before or within the skull device. Neither of the cited references provides a suggestion or incentive for utilizing a skull device in this manner

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and it is therefore submitted that the claims would not be obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. 103.

Applicants' German representative advises that the corresponding German application has matured into German Patent No. 199 39 785 with a main claim that is basically of the same scope as Claim 1 of the present application. The Examiner's attention is also directed to the generally favorable International Preliminary Examination Report in International Application PCT/EP00/007989.

It is requested that the Examiner reconsider and withdraw the rejections of the claims and pass the application to issue. If it would assist in expediting the prosecution of the application, the Examiner is invited to telephone the undersigned at 260-460-1692,

John F. Hoffman
Registration No. 26,280
Attorney for Applicants

JFH/nw

BAKER & DANIELS

111 East Wayne Street, Suite 800

Fort Wayne, IN 46802 Telephone: 260-424-8000

Facsimile: 260-460-1700

Enc. Petition for Extension of Time

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